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## NOTICE OF ALLOWANCE AND FEE(S) DUE

2292 7590 05/01/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 EXAMINER
HEINCER, LIAM J
ART UNIT PAPER NUMBER
1796

DATE MAILED: 05/01/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,986	03/17/2006	Hideyuki Nishio	1600-0161PUS1	6269

TITLE OF INVENTION: PROCESS FOR PRODUCING POLYETHER POLYMER COMPOSITION, POLYETHER POLYMER COMPOSITION, AND SOLID ELECTROLYTE FILM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/03/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed off tions.	or transm ig the Pat ierwise in	itting the ISSU ent, advance or Block 1, by (a	TE FEE and PUBLICAT ders and notification of specifying a new corre	TON FEE (if requiremaintenance fees very spondence address;	ired). I vill be and/or	Blocks 1 through 5 st mailed to the current (b) indicating a sepa	nould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Fee	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
PO BOX 747	7590 05/01 ART KOLASCH TH, VA 22040-0747	& BIR	СН	I b	Cer	tificate	of Mailing or Trans	mission g deposited with the United it class mail in an envelope above, or being facsimile ate indicated below.
								(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR	ξ	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/536,986	03/17/2006			Hideyuki Nishio		1	600-0161PUS1	6269
TITLE OF INVENTION SOLID ELECTROLYTE		DUCING	POLYETHER	POLYMER COMPOSIT	TON, POLYETHE	R POL	YMER COMPOSITIO	ON, AND
APPLN, TYPE	SMALL ENTITY	ISSUE	FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	:	81510	\$300	\$0	\$1810		08/03/2009
EXAM	INER	AR	T UNIT	CLASS-SUBCLASS	1			
HEINCER			1796	528-425000	-			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignce is ident h in 37 CFR 3.11. Comp	nge of Cor " Indicationed. Use of A TO BE F	respondence n form a Customer PRINTED ON	(1) the names of up to or agents OR, alternative (2) the name of a sing registered attorney or 2 registered patent att listed, no name will be PHE PATENT (print or ty data will appear on the p T a substitute for filing an (B) RESIDENCE: (CTT	ively, the firm (having as a agent) and the nam orneys or agents. If a printed.  pe) patent. If an assign assignment.	memb es of u no nam ee is id	er a 2p to p to ge is 3	ocument has been filed for
Please check the appropri	iate assignee category or	categories	(will not be pr	inted on the patent):	Individual 🚨 Co	orporati	on or other private gro	oup entity Government
4a. The following fee(s) a  ☐ Issue Fee ☐ Publication Fee (N ☐ Advance Order - #	o small entity discount j	oermitted)		o. Payment of Fee(s): (Ple     A check is enclosed.     Payment by credit ca     The Director is hereb     overpayment, to Dep	rd. Form PTO-2038 v authorized to cha	is atta	ched. required fee(s), any de	
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NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will tes Patent	not be accepted and Trademark	d from anyone other than Office.	the applicant; a regi	stered a	attorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
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This collection of informan application. Confident submitting the completed this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DC 13-1450.	FR 1.311. U.S.C. 12 USPTO. rden, shou ONOT SE	The information of the control of th	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by t stimated to take 12 widual case. Any co- er, U.S. Patent and O THIS ADDRESS	he publ minutes omment Traden S. SENI	tic which is to file (and to complete, includin s on the amount of tin nark Office, U.S. Depo D TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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2292	7590 05/01/2009		EXAMINER		
BIRCH STEWART KOLASCH & BIRCH			HEINCE	R, LJAM J	
PO BOX 747		ART UNIT	PAPER NUMBER		
FALLS CHURCI	I, VA 22040-0747	1796			

DATE MAILED: 05/01/2009

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 7 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 7 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)	
10/536,986	NISHIO ET AL.	
Examiner	Art Unit	
Liam I Heincer	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 1/6/09.
- 2. The allowed claim(s) is/are 1-8 and 10-12.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. T Certified copies of the priority documents have been received.
    - Certified copies of the priority documents have been received in Application No.
      - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date \_\_\_\_\_\_

  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other \_\_\_\_\_.

/Mark Eashoo/

Supervisory Patent Examiner, Art Unit 1796

Application/Control Number: 10/536,986

Art Unit: 1796

#### DETAILED ACTION

### Allowable Subject Matter

Claims 1-8 and 10-12 are allowed.

The following is an examiner's statement of reasons for allowance: Claim 1 is directed towards a process for producing a composition comprising a polyether polymer, an insoluble antioxidant and a soluble stabilizer, where the solubility is measured in an aliphatic hydrophobic solvent. Claims 5 and 6 are directed towards compositions made from this process and having specific properties. The prior art of record does not teach or suggest the claimed combination of a polyether polymer, an insoluble antioxidant and a soluble stabilizer.

Miura et al. (US Pat. 5,968,681) teaches the claimed slurry method for producing polyether particles, but is silent towards stabilizers and antioxidants. Ba Le et al. (US Pat. 6,673,273) teaches adding an antioxidant to a polyether (13:45-58). However, the list of antioxidants includes both soluble and insoluble compounds. Ohtsuka et al. (US Pat. 5,840,809) teaches adding as stabilizer to a polyether polymer (9:1-47). This list also includes both soluble and insoluble compounds. The prior art of record does not sufficiently distinguish between soluble and insoluble compounds in a manner that would motivate a person having ordinary skill in the art at the time of invention to choose an insoluble antioxidant and a soluble stabilizer, absent impermissible hindsight.

Additionally, the original specification establishes the criticality of using the insoluble antioxidant and a soluble stabilizer in terms of reduced viscosity and gel content (See tables 1 and 2 and Example 7).

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Art Unit: 1796

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/ LJH Supervisory Patent Examiner, Art Unit 1796 April 23, 2009